

96. (New) The polishing article of claim 90, wherein the at least one conductive element comprises one or more graphite rods each seated on a graphite carrier.

97. (New) The polishing article of claim 90, wherein the at least one conductive element comprises one or more carbon fibers disposed on a carrier.

98. (New) The polishing article of claim 90, wherein the at least one conductive element comprises a plurality of loop of graphite, gold, or conductive metal, coupled to a carrier comprising a tie wire base.

99. (New) An apparatus for processing a substrate, comprising:
a basin;
a permeable disc disposed in the basin;
a polishing article disposed on the permeable disk and at least a portion of the polishing article comprising an electrode, wherein the polishing article comprises:
a body having a polishing surface adapted to polish the substrate; and
at least one conductive element embedded in the polishing surface, the conductive element having a contact surface that extends beyond a plane defined by the polishing surface.
a counter electrode disposed in the basin between the permeable disc and the bottom of the basin; and
a polishing head adapted to retain the substrate during processing.

REMARKS

This is intended as a full and complete response to the Office Action dated December 12, 2002, having a shortened statutory period for response set to expire on March 12, 2003. Claims 1-41 are pending in this application. Claims 29-40 are allowed by the Examiner. Claims 1, 2, 4, 5, 8, 9, 13-15, 22, and 28 were considered and stand rejected by the Examiner. Claims 3, 6, 7, 10-12, 16-21, 23-27, and 41 are objected to by the Examiner but would be allowed if rewritten in independent form.

Claims 42-99 are presented to the Examiner for consideration. Claim 3 has been rewritten in independent form as new claim 42. Claim 6 has been rewritten in independent form as new claim 47. Claim 10 has been rewritten in independent form as new claim 53. Claim 12 has been rewritten in independent form as new claim 59. Claim 16 has been rewritten in independent form as new claim 64. Claim 21 has been rewritten in independent form as new claim 77. Claim 23 has been rewritten in independent form as new claim 82. Claim 24 has been rewritten in independent form as new claim 90. Claim 41 has been rewritten in independent form as new claim 99. Additional claims are being presented and dependent on the objected to subject matter rewritten into the new independent claims described above. The Applicants asserts that the new claims are allowable as being dependent on allowable independent claims. Applicants cancel claims 1-28, 30, and 41, without prejudice. Applicants believe that no new matter has been introduced in this response.

Claims 1, 2, 5, 8 and 9 stand rejected under 35 U.S.C. 102(b) as being clearly anticipated by *Kaanta, et al.* (U.S. Patent No. 4,793,895). Applicant respectfully traverses the rejections with respect to claims 1, 2, 5, 8 and 9, and will present substantive arguments with respect to the references cited by the Examiner in a preliminary amendment accompanying any continuation application.

Claims 1, 5, 8, 9, 13, 14, 15, 22 and 28 stand rejected under 35 U.S.C. 102(e) as being anticipated by *Paton* (U.S. Patent No. 6,297,159). Applicant respectfully traverses the rejections with respect to claims 1, 5, 8, 9, 13, 14, 15, 22 and 28, and will present substantive arguments with respect to the references cited by the Examiner in a preliminary amendment accompanying any continuation application.

Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over *Kaanta, et al.* in view of *Uzoh, et al.* (U.S. Patent No. 5,807,165). Applicant respectfully traverses the rejections with respect to claim 4, and will present substantive arguments with respect to the references cited by the Examiner in a preliminary amendment accompanying any continuation application.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Please replace the paragraph [0106] with the following paragraph:

[0106] Figure 11A depicts another embodiment of a conductive member 1100 disposed in the pocket 1004 of the polishing article 205. The conductive member 1100 is generally an at least partially conductive bar, cylinder, rod, roller, or coil that includes a contact surface 1102 that extends above a plane defined by the polishing surface 1002 of the body 1006. The contact surface 1102 is generally rounded to prevent damage to the substrate during processing.

Please replace the paragraph [0113] with the following paragraph:

[0113] The contact member 1204 is typically formed from a conductive material such as graphite or a metal or other at least partially conductive material compatible with process chemistries as described herein. The contact member 1204 is typically a cylinder, rod, roller, coil, bar or ball although other shapes may be utilized. For example, the contact member 1204 is a graphite rod seated on a graphite carrier 1202 in the embodiment depicted in Figure 12A and the contact member 1204 is a plurality of graphite or gold balls seated on and electrically coupled through a graphite carrier 1202 in the embodiment depicted in Figure 12B.

Support for the amendments in the specification are found in claims 19, 20, 27, 33, and 38, and in paragraph [0113].

IN THE CLAIMS:

29. (Amended) A polishing article for polishing a substrate, comprising:
a body having a polishing surface adapted to polish the substrate;

at least one conductive element embedded in the polishing surface, wherein the conductive element has a contact surface that extends beyond a plane defined by the polishing surface; and

one or more pockets formed in the polishing surface, wherein the conductive element is disposed in at least one of the pockets.

[30] 32. (Amended) The polishing article of claim 29, further comprising a biasing member disposed in the pocket between the conductive element and the body.

33. (Amended) The polishing article of claim 29, wherein the conductive element is selected from at least one of the group of conductive tubing, a brush, a spring, a pin, a bar, a rod, a coil, a cylinder, a roller, a ball, or combinations thereof.

38. (Amended) The polishing article of claim 36, wherein the contact member comprises a plurality of balls, pins, a rod, a spring, conductive tubing, a brush, a bar, a coil, a cylinder, a roller, or combinations thereof.